

STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Add Section 721,
Title 14, California Code of Regulations
Re: Suspension of flow requirements from Grizzly Valley Dam at Lake Davis

- I. Date of Initial Statement of Reasons: December 12, 2006
- II. Dates and Locations of Scheduled Hearings:
 - (a) Notice Hearing: Date: February 2, 2007
Location: Monterey, CA
 - (b) Discussion Hearing: Date: March 2, 2007
Location: Arcata, CA
 - (c) Adoption Hearing: Date: April 13, 2007
Location: Bodega Bay, CA
- III. Description of Regulatory Action:
 - (a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Fish and Game Code (FGC) Section 5937 requires that sufficient water be supplied through or around a dam to keep in good condition any fish that may be planted or exist below the dam. In addition, FGC subsection 219(a) allows the Fish and Game Commission (Commission) to adopt regulations that supersede any FGC section for the protection of fish, wildlife, and other natural resources under the jurisdiction of the Commission.

The Department of Fish and Game (Department) has proposed to eradicate northern pike from Lake Davis (Plumas County) and all of its tributaries to re-establish the trout fishery at Lake Davis and to prevent the pike from escaping from the reservoir and causing adverse ecological impacts, such as those that have occurred at Lake Davis, in other parts of the State or region. A joint EIR/EIS was prepared by the Department and the U.S. Forest Service for the proposed Lake Davis Pike Eradication Project and made available for public comment. The 45-day public comment period ended October 16, 2006. Seven alternatives were proposed including: a no project/no action alternative; five alternatives

using the chemical piscicide rotenone at various reservoir water levels; and a no-chemical alternative that calls for complete dewatering of the reservoir and its tributaries.

As of the date of this Initial Statement of Reasons, a project involving the use of rotenone has not been approved. However, if one is approved, the Department would request the Commission adopt a regulation to temporarily supersede FGC Section 5937 for the specific and limited purpose of implementing the project to eradicate pike, which would protect fish, wildlife, and other natural resources under the jurisdiction of the Commission. Because of the time it would take for the Commission to notice, consider, and potentially adopt such a regulation, this Initial Statement of Reasons has been prepared prior to the approval of a pike eradication project and the application of any such regulation would be limited to an approved project. If the Department approves such a project, the outlet valve in Grizzly Valley Dam would be closed for at least five days and potentially up to a total of 45 days following application of rotenone to the reservoir waters, depending on which neutralization option is permitted. Closing the outlet valve would result in dewatering Big Grizzly Creek for at least a 400-yard reach downstream where accretion flows appear. This proposal requests that the Commission temporarily supersede FGC Section 5937 specifically for Grizzly Valley Dam to aid the eradication of pike from Lake Davis and its tributaries.

Whether or not FGC Section 5937 applies to the unique circumstances of the proposed pike eradication project is a question the resolution of which would involve complex biological, technical and legal issues. This proposed regulation is a cautionary approach that is intended to minimize the risk of delay from legal challenges that could delay implementation of an approved project for weeks to a point in time when seasonal conditions are not ideal, as was the case in 1997, or for another year until reservoir levels and seasonal conditions are optimal for an effective treatment (assuming pike have not escaped Lake Davis in the meantime, and the Department has the ability and opportunity to implement an eradication project in a future year). Given the ever-increasing pike population, the increasing incidence of anglers catching pike, recent known incidents of anglers moving live pike, and the potential for spilling of the dam in extremely wet years, the Department believes it is critical to minimize the risk of delay.

Therefore, this proposal is requested to be considered in the Commission's early 2007 schedule. It is anticipated that the Department will decide whether to approve a pike eradication project prior to the Commission's March meeting.

Background

Pike were illegally introduced into Frenchman Lake, near Lake Davis, in the late 1980s and were first observed there in 1988. These fish subsequently spread into the Sierra Valley at the headwaters of the Middle Fork Feather River. Pike were successfully eradicated from these areas in 1991 and 1992 and remain absent there at this time. They were first observed in Lake Davis in 1994.

As a result of the 1994 discovery of pike in Lake Davis, the Department implemented an eradication project in 1997. The Department prepared an EIR to evaluate and select appropriate management actions for that project. In October 1997, the Department treated Lake Davis with rotenone.

Pike were rediscovered in Lake Davis in 1999. These pike either survived the 1997 treatment or were reintroduced into the reservoir. Genetic studies indicate that the current population is descended from the initial population. However, these studies are inconclusive as to whether the current population is from offspring that survived the 1997 treatment in the reservoir and surrounding waters or were from fish that were removed from Lake Davis prior to the treatment and then reintroduced to the reservoir after the 1997 treatment.

Following the rediscovery of pike, a group of community members, including private citizens and elected city and county officials, formed the Lake Davis Steering Committee. Representatives from State and Federal agencies participate in the meetings to share information, answer questions, and address issues relating to pike in Lake Davis. This group developed a plan titled "Managing Northern Pike at Lake Davis, A Plan for Y2000," known as the *Y2000 Plan*, which outlined a series of measures to reduce the pike population. Since 2000, many of these measures have been used to try to control and contain the pike population within the reservoir. In spite of these intensive efforts, data indicate that the pike population continues to expand.

In December 2003, the Lake Davis Steering Committee sent a letter to Secretary for Resources Mike Chrisman, requesting that the Department investigate methods to rid Lake Davis of the pike. Secretary Chrisman responded by recognizing the need for the Department to investigate safe and effective methods of ridding the state of pike. He also acknowledged that cooperation with the local community, protection of public health, and consideration of economic issues are important to any decision to effectively deal with the pike. In May of 2004, the Department compiled a list of eradication options which had been suggested by various persons

and/or agencies. An evaluation of the list indicated that the use of formulated rotenone or a combination of formulated rotenone and rotenone powder combined with a significant drawdown of Lake Davis could be a feasible, effective, and safe method for eradicating the pike. It also recommends that any such project, if proposed by the Department, should be thoroughly evaluated pursuant to applicable environmental laws. It was determined that continuing the current "Control and Containment" program was not a viable method for eradication.

If pike are not eradicated from Lake Davis, they will almost certainly escape the reservoir and spread to other waters within the state at some point in the future. Once they become established in these waters, it will be very difficult if not impossible to control their numbers and prevent their spread. Pike are likely to have substantial ecological and economic effects if they become established in the waters of the Central Valley.

Since the rediscovery of pike at Lake Davis in 1999, the pike are now well-established and are found throughout the reservoir. Consequently, the pike have adversely affected the trout fishery as well as the ecology of the reservoir. The problems pike have caused at Lake Davis could occur in other areas of the state or region if pike escape or are moved and become established elsewhere. For example, pike would be well-adapted to establish successful populations in many other waters of the state including waters of the Central Valley and the Delta (see EIR/EIS Appendix A, *Assessment of Northern Pike Habitat in California's Central Valley and Potential Impact of Introduction* [Maniscalco and Morrison 2006]). One of the reasons that pike have the ability to invade many waters in California is that pike can tolerate conditions that are very stressful or lethal to many fish (e.g. high temperatures, low dissolved oxygen concentrations, brackish water).

In many places habitat characteristics in the Sacramento-San Joaquin Delta and rivers in the Central Valley are very similar to those required by pike, and Central Valley streams and the Delta have high species richness. These waters support a number of species whose populations have already declined significantly, as well as many other species which are vulnerable to predation by pike (Maniscalco and Morrison 2006, Appendix A). Many of these species are likely to be adversely affected should pike become established in the waterways of Central Valley. These include Chinook salmon, steelhead, delta smelt, and splittail, the populations of which are currently in peril, even without the presence of pike in the Delta.

The Department proposes to eradicate pike from Lake Davis and all of its tributaries to re-establish the trout fishery at Lake Davis and to prevent the

pike from escaping from the reservoir and causing ecological impacts such as those that have occurred at Lake Davis in other parts of the State or region.

The project is needed because efforts to control and contain the pike population in Lake Davis have been of limited value. The pike population continues to grow despite these efforts and anglers are increasingly catching more pike. In addition, on May 20, 2006, the Department conducted a checkpoint at Lake Davis and discovered that anglers are moving live pike from the reservoir. Of 71 vehicles that were inspected, five pike were found, two of which were alive. All five pike were confiscated. In addition, in 2006 the reservoir came within 27 inches of capacity because of an unusually wet winter and spring, and small pike were found for the first time in the cove near the Lake Davis spillway. Should pike escape or be moved from Lake Davis, they have the potential to do irreversible damage to the aquatic ecosystem and fisheries in the San Francisco Bay-Delta estuary and its watershed, as well as potentially harm other areas of California and the region. The CALFED Bay-Delta Program Ecosystem Restoration Program Plan has identified halting the unauthorized introduction and spread of potentially harmful non-native introduced species of fish, such as pike in Lake Davis, in the Bay-Delta and Central Valley as a strategic objective. As such, the proposed regulation would protect fish, wildlife, and other natural resources under the jurisdiction of the Commission.

- (b) Authority and Reference Sections from Fish and Game Code for Regulation:

Authority: Sections 215, 219, 220, and 315, Fish and Game Code.

Reference: Sections 215, 219, and 220, Fish and Game Code.

- (c) Specific Technology or Equipment Required by Regulatory Change:

None.

- (d) Identification of Reports or Documents Supporting Regulation Change:

Lake Davis Pike Eradication Project Draft EIR/EIS, September 1, 2006.
The draft EIR/EIS is available on line at:
<http://www.dfg.ca.gov/northernpike/EIR-EIS/>

- (e) Public Discussions of Proposed Regulations Prior to Notice Publication:

The proposed regulation concept was included in the joint EIR/EIS that

was available for review by the public for 45-days ending October 16, 2006.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

No alternatives were identified.

(b) No Change Alternative:

If the Commission does not have the authority to temporarily supersede FGC section 5937 while the project is being implemented, it is possible that an approved project may not be conducted if legal challenges based on FGC section 5937 are brought. The regulatory proposal is intended to minimize the risk of delay from legal challenges with respect to FGC section 5937, which would involve complex biological, technical, and legal issues that may not be resolved quickly in a court of law.

(c) Consideration of Alternatives:

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective and less burdensome to the affected private persons than the proposed regulation.

V. Mitigation Measures Required by Regulatory Action:

Environmental impacts related to the entire project have been addressed in the joint EIR/EIS. Impacts to fish from those neutralization options (see Appendix E of the EIR/EIS) involving a significant decrease in flow of Big Grizzly Creek are mitigated as described in Section 7.1.2.4. of the EIR/EIS, Mitigation AR-23. A fish rescue operation would occur prior to rotenone treatment. The fish would be transported downstream to an area not affected by dewatering of the streambed. In addition, fish would be restocked if necessary.

VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed regulatory action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. This regulation proposal only affects a 400-yard reach of Big Grizzly Creek from 5 to 45 days.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California:

None.

- (c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed regulatory action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

None.

- (e) Nondiscretionary Costs/Savings to Local Agencies:

None.

- (f) Programs Mandated on Local Agencies or School Districts:

None.

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4:

None.

- (h) Effect on Housing Costs:

None.

Informative Digest/Policy Statement Overview

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(assuming pike have not escaped Lake Davis in the meantime, and the Department has the ability and opportunity to implement an eradication project in a future year). Given the ever-increasing pike population, the increasing incidence of anglers catching pike, recent known incidents of anglers moving live pike, and the potential for spilling of the dam in extremely wet years, the Department believes it is critical to minimize the risk of delay.

Therefore, this proposal is requested to be considered in the Commission's early 2007 schedule. It is anticipated that the Department will make a decision about which project alternative to authorize prior to the Commission's March meeting.